Attorney Docket No. 2105.0013C

PATENT

Unknown

Unknown

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of Payne et al.

Serial No.: 10/581,905

Confirmation No.: Unknown

Filed:

June 7, 2006

For:

Biolithographical Deposition, and Materials and Devices Formed Therefrom

Examiner:

Art Unit:

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.97(b)

Pursuant to the duty imposed by 37 C.F.R. §1.56 to disclose information which may be material to the patentability of the above-identified patent application, the Applicant(s) would like to direct the Examiner's attention to the documents listed on the enclosed Information Disclosure Citation Form (PTO/SB/08). In accordance with this duty of disclosure, Applicant(s) hereby submits the following information in conformance with 37 C.F.R. §§1.97 and 1.98.

nance v	with 37 C.F.R. §§1.97 and 1.98.
\boxtimes	Pursuant to 37 C.F.R. §1.98, a copy of each document cited in the attached Form PTO/SB/08 is enclosed.
	The subject Information Disclosure Statement is being filed without copies of the listed U.S. Patents and/or U.S. patent application publications pursuant to the waiver of the requirement under 37 C.F.R. §1.98(a)(2)(i) for applications filed after June 30, 2003. Copies of the listed foreign patent documents and/or non-patent literature are enclosed
	herewith. No copies of the publications listed on the attached Form PTO/SB/08A are being provided pursuant to 37 C.F.R. §1.98(d) because the publications were previously cited by or submitted to the Office in prior Application were a to which the above-identified application claims priority under 35 U.S.C. §120.

Attorney Docket No. 2105.0013C Serial No. 10/581,905

П	Publication(a) Page 2
	Publication(s) listed on the attached Form PTO/SB/08A were cited application serial no and mailed on
	\$609 of the M.P.E.D. A Pursuant to
	examination report, which cites such non-English language publication(s). Enclosed is a copy of a non-English publication(s) English language publication (copy enclosed) claims priority from this non-English publication.
	Enclosed is an explanation of non-English publication(s) for which for which
	Enclosed is an English translation of non-English publication(s) cited in the attached Form PTO/SB/08 A
This Inf	Enclosed is a copy of pending patent Application Serial No.
time periods:	ormation Disclosure Statement is filed within any one of the following
_	within three months from the filing date of this national application other than a CPA under 37 C.F.R. § 1.53(d); within three months from the
\(\begin{array}{c} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	and the maining date of a first office action and
L.	before the mailing of a first office action after the filing of a request for continued examination under 37 C.F.R. § 1.114.

The Commissioner is hereby authorized to charge payment of any fees required for the above-identified application or credit any overpayment to Deposit Account No. 05-0460.

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application.

Applicant does not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

Attorney Docket No. 2105.0013C Serial No. 10/581,905 Page 3

It is respectfully requested that the Examiner consider the above-noted information and return an initialed copy of the attached Form PTO/SB/08A to the undersigned.

EDELL, SHAPIRO & FINNAN, LLC CUSTOMER No. 27896 1901 Research Boulevard, Suite 400 Rockville, MD 20850 (301) 424-3640

Respectfully submitted by

EDELL, SHAPIRO & FINNAN, LLC

By:

Jeffrey 1. Auerbach Reg. No. 32,680

INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Filing Date First Named Inventor Group Art Unit Examiner Name	Complete if Known 10/581,905 June 7, 2006 Payne et al. Unknown Unknown
(use as many sheets as necessary) Sheet 1 P 4	Attorney Docket Number	2105.0013C

		700 4	U.S. PA	TENT DOCUMENTS	
Examiner	L 1	S. Patent	Document Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY 07/25/1978
nitials*	No. FR	BEMA		James H. McAlear, et al.	07/04/2002
		4,103,004	Al	Jody G. Redepenning	03/21/2006
		2002/0084194	B2	Jody G. Redepenning	05/11/2006
		7,014,749	Al	Jody G. Redepenning	
		2006/0099456	—— ^1		
	1				
	+				
	+				
	+				
					_
	+				
		-			
					
					
					
		l			

					1 of Cited	Date of Publication	76
Examiner Initials*	Cite No. ¹	Office ³	Foreign Patent Doc	Kind Code ⁵	Name of Patentee or Applicant of Cited Document	of Cited Document MM-DD-YYYY	
		JP JP WO WO WO	09-239396 09-124703 00/11038 02/059395 2004/018741	(if known) A A2 A1	Tatsumi Kenji et al. Ono Takashi et al. Guneet Kumar, et al. Jody G. Redepenning Hyunmin Yi	09/16/1997 11/24/1998 11/20/1999 08/01/2002 03/04/2004	
	-						

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance Examiner and not considered. Include copy of this form with next communication to applicant.

Unique citation designation number.
 See attached Kinds of U.S. Patent Documents.
 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).
 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.
 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.
 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible.
 Applicant is to place a check mark here if English language Translation is attached.

e type a plus sign (+) ilistue uns con 2	PTO/SB/	08A (08-00
	Complete if Known	
Substitute for form 1449B/PTO	Application Number 10/581,905 Filing Date June 7, 2006	
INFORMATION DISCLOSURE	First Named Inventor Payne et al. Group Art Unit Unknown Linknown	

Examiner Name

Acromey Docket Number

Unknown

2105.0013C

STATEMENT BY APPLICANT
(use as many sheets as necessary) (use as many sheets as neces

		OCT 2 6 2006 OCT 2 6 2006 ONER DOCUMENTS NON PATENT LITERATURE DOCUMENTS ONER DOCUMENTS NON PATENT LITERATURE DOCUMENTS ONER DOCUMENTS NON PATENT LITERATURE DOCUMENTS Include name of the attitude (when appropriate), title of the item (book, linclude name of the attitude (when appropriate), title of the item (book, linclude name of the attitude (when appropriate), title of the item (book, linclude name of the attitude (when appropriate), title of the item (book, linclude name of the attitude (when appropriate), title of the item (book, linclude name of the attitude (when appropriate), title of the item (book, linclude name of the attitude (when appropriate), title of the item (book, linclude name of the attitude (when appropriate), title of the item (book, linclude name of the attitude (when appropriate), title of the item (book, linclude name of the attitude name of the attitude (when appropriate), title of the item (book, linclude name of the attitude name of the attitude (when appropriate), title of the item (book, linclude name of the attitude name of the
		OTHER DOCUMENTS. LETTERS), title of the article (when appropriate, title of the ferror of applicable of the article (when appropriate of the and/or country)
xaminer	Cite	Include name of the author (in CAlaba, etc.), date, page(s), volume-issue number(s), publisher, see
nitials*	No.1	magazine, journal, serial, And Marie analog, etc.), where published. where published. BEEBE, DAVID J. ET AL., Functional Hydrogel Structures For Autonomous Flow Control Inside Microfluidic Channels,
ilitimo	l l_	The First Conditional Hydrogel Structures For Autonomous Flow Conditional Hydrogel Structures Flow Conditional Hydrogel Flow Flow Flow Flow Flow Flow Flow Flo
	AL1	BEEBE, DAVID J. ET AL., Publicational Transport
	1	Letters to Nature, vol. 404, 6 House
	1 1	Salarida Nanocrystals with Dual Color Emission, Web
		CHEN, CHIA-CHUN, Self-Assembly of Monolayers of Cadmium Selenide Nanocrystals with Dual Color Emission, Web CHEN, CHIA-CHUN, Self-Assembly of Monolayers of Cadmium Selenide Nanocrystals with Dual Color Emission, Web
	AM1	CHEN, CHIA-CHUN, Self-Assentity of Montal-Published 07/07/1999, Langmuir 1999, 15, 6845-6850.
	1 1	Published 07/07/1775, 2
	1 1	CHEN, GUOPING, ET AL., pH-Sensitive Thin Hydrogel Microfabricated by Photolithography, Published on the web
	ANI	CHEN GUOPING, ET AL., pH-Sensitive Thin Hydroger Wildows
	Airi	10/09/1998, Langitum 1990, 1995
		Web Dublished 09/30/2003,
		CHEN, TIANHONG, Enzymatic Methods for in Situ Cell Entrapment and Cell Release, Web Published 09/30/2003,
	AO1	CHEN, TIANHONG, Enzymatic Methods for in Site
		Riomacromolecules 2005, 4, 1555
	1	CHEN, TIANHONG, Nature-Inspired Creation of Protein-Polysaccharide Conjugate and Its Subsequent Assembly onto a CHEN, TIANHONG, Nature-Inspired Creation of Protein-Polysaccharide Conjugate and Its Subsequent Assembly onto a
		News-Inspired Creation of Protein-Polysaccharde Conjugate and its Secretary
	AP1	CHEN, TIANHONG, Nature-Inspired Creation of Protein-rulysate of Patterned Surface, Web Published 10/03/2003, Langmuir 2003, 19, 9382-9386.
	1	Patterned Surface, Web 1 donor-
	1	Christian of Laver-by-Laver Thin Films, Communications,
		CLARK, SARAH L. ET AL. Engineering the Microfabrication of Layer-by-Layer Thin Films, Communications,
	AQ1	Advanced Materials, July 24, 1998
l	1	Advances Web Dublished
l	1	FERNANDES, ROHAN Thermo-Biolithography: A Technique for Patterning Nucleic Acids and Proteins, Web Published FERNANDES, ROHAN Thermo-Biolithography: A Technique for Patterning Nucleic Acids and Proteins, Web Published
	ARI	FERNANDES, ROHAN Thermo-Biolithography. A Technique
1	1 '"	1 12/25/2003, Langinuii 2004, 20, 204
1	1	FERNANDES, ROHAN, Electrochemically Induced Deposition of a Polysaccharide Hydrogel onto a Patterned Surface, Journal of March 1997,
1		Photosphemically Induced Deposition of a Polysaccharide Hydroger one a Landing
 	AS1	FERNANDES, ROHAN, Electrochemically induces with the Published 04/15/2003, Langmuir 2003, 19, 4058-4062.
1	1	Web Published 04/13/2003, Edward
1	1	GAO, MINGYUAN, Lateral Patterning of CdTe Nanocrystal Films by the Electric Field Directed Layer-by-Layer GAO, MINGYUAN, Lateral Patterning of CdTe Nanocrystal Films by the Electric Field Directed Layer-by-Layer 1 GAO, MINGYUAN, Lateral Patterning of CdTe Nanocrystal Films by the Electric Field Directed Layer-by-Layer
1		MINICIAN Lateral Patterning of CdTe Nanocrystal Films by the Electric 1997
	AT	GAO, MINGYUAN, Lateral Patterning of CdTe Nanocrystal Times of Assembly Method, Web Published 03/27/2002, Langmuir 2002, 18, 4098-4102.
1	1	Assembly Medical, 1997
1	1	SPelemoric Devices for Biological Applications, Journal of Sensors and
<u> </u>		KASTANTIN, MARK J., Integrated Fabrication of Polymeric Devices for Biological Applications, Journal of Sensors and Materials, Special Issue on Biomedical Applications, Inc. Press, Published September 2003.
l l	AU	Materials Special Baucon Diameter
1	}	
l l	l l	MUZZARELLI, RICCARDO A. A. ET AL., Tyrosinase-mediated quinine tanning of chitinous materials, Carbohydrate
<u> </u>	- A	MUZZARELLI, RICCARDO A. A. EI AL., 19103111112
1	^`	1 Polymers 211 (1994) 293-300.
- [1	W1 O'CONNOR, STEPHEN M. ET AL., Immobilization of neural cells in three-dimensional matrices for biosensor W1 O'CONNOR, STEPHEN M. ET AL., Immobilization of neural cells in three-dimensional matrices for biosensor W1 O'CONNOR, STEPHEN M. ET AL., Immobilization of neural cells in three-dimensional matrices for biosensor
1	1	TO ALL Immobilization of neural cells in three-dimensional matrices to
}	- A	WI O'CONNOR, STEPHEN M. E1 AL., Interconnection of the Alexander of the Al
		1 t Dissender & KINGECHURIO IT (#***/

\ <u>\</u>					
Examiner Signature *EXAMINER: Init and not considered.	itial if reference considered, whether or not citation is in . Include copy of this form with next communication to	Date Considered a conformance with applicant.	MPEP 609. Draw	line through citation if not in conforma	ince

Unique citation designation number.
 Applicant is to place a check mark here if English language Translation is attached.

		P10/5B/08A (08-00)
Substitute for form 1449B/PTO		Complete if Known
	Application Number	10/581,905
INFORMATION DISCLOSURE	Filing Date	June 7, 2006
STATEMENT DV ADDITION	First Named Inventor	Payne et al.
STATEMENT BY APPLICANT	Group Art Unit	Unknown
(use as many sheets as necessary)	Examiner Name	Unknown
Sheet 3	A#### 73 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
OCT 2 6 2006 %	Attorney Docket Number	2105.0013C
OCI 2 17 2000		

Examiner	Cite	Include name of the authors of APITAL LETTERS file of the APITAL LETTERS fi	
Initials*	No.1	magazine, journal, sea posium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country	T ²
	AL2	O CONNOR, STEPHEN M ET AL Immedia:	
		O'CONNOR, STEPHEN M. ET AL., Immobilization of neural cells in three-dimensional matrices for biosensor applications, Biosensors & Bioelectronics 14 (2000) 871-881.	
	AM2	PAYNE, GREGORY F FT AL TWO GREEN CO.	
		PAYNE, GREGORY F. ET AL., Tyrosinase Reaction/Chitosan Adsorption for Selectively Removing Phenols from Aqueous Mixtures, Biotechnology and Bioengineering, Vol. 40 Pg. 1011-1018 (1992).	
	AN2	SEONG CLUIDLET AL	
		SEONG, GI HUN ET AL., Fabrication of Microchambers Defined by Photopolymerized Hydrogels and Weirs within Microfluidic Systems: Application to DNA Hybridization, Anal. Chem. 2002, 74, 3372-3377.	
	AO2	SIRVAR VALIGUE PT.	
		SIRKAR KAUSHIK ET AL., Amperometric Biosensors Based on Oxidoreductases Immobilized in Photopolymerized Poly(ethylene glycol) Redox Polymer Hydrogels, Anal. Chem. 1998, 2888-2894.	
	AP2	SIN WEIGHNO	
	102	SUN, WEI-QIANG ET AL., Tyrosinase-Containing Chitosan Gels: A Combined Catalyst and Sorbent for Selective Phenol Removal, Biotechnology and Bioengineering, Vol. 51, Pages 79-86 (1996) John Wiley & Sons Inc.	
	AQ2	TAKENAKA SUDISUKE ETT.	
- 1		TAKENAKA, SHINSUKE ET AL., Sol-gel preparation of single-layer, 0.75 um thick lead zirconate titanate films from lead nitrate-titanium and zirconium alkoxide solutions containing polynigate religious propagation.	
		Volume 79, Number 21, Pages 3845-3847, Published 11/19/2001.	
ĺ	AR2	TATSUMI, KENJI, Removal of Penols From Wastawater Bu A - F	
		TATSUMI, KENJI, Removal of Penols From Wastewater By An Enzyme And Chitosan, Advances in Chitin Sciences 1997, Vol. 2, pages 864-869.	
	AS2	WADA CUDIN	
- 1	11.52	WADA, SHINJI, Removal of Phenols and Aromatic Amines from Wastewater by a Combination Treatment with Tyrosinase and a Coagulant, Biotechnology & Bioengineering, Vol. 45, Pages 204, 200 (1905)	
		50 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	
T	AT2	WU, LI-QUN, Chitosan-Mediated and Spatially Col.	
		WU, LI-QUN, Chitosan-Mediated and Spatially Selective Electrodeposition of Nanoscale Particles, Web Published 03/17/2005, Langmuir 2005, 21, 3641-3646.	
	ATTO		
	AU2	WU, LI-QUN, Spatially Selective Deposition of a Reactive Polysaccharide Layer onto a Patterned Template, Web Published 01/04/2003, Langmuir 2003, 19, 519-524.	
	AV2	WILLIOID Value D	
		WU, LI-QUN, Voltage-Dependent Assembly of the Polysaccharide Chitosan onto an Electrode Surface, Web Published 09/21/2003, Langmuir 2002, 18, 8620-8625.	

Examiner			
Signature	Date		
*EXAMINER: Initial if reference considered, whether or not aircrion is	Considered		
and a reference considered whether or not citation in		<u> </u>	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Unique citation designation number.
 Applicant is to place a check mark here if English language Translation attached.

Examiner

Initials*

Cite No.1

				1 10/3D/00A (08-00)
Su	bstitute for form 14	49B/PTO		Complete if Known
- 1		32/110	Application Number	10/581,905
П	TFORMATIC	ON DISCLOSURE	Filing Date	June 7, 2006
G'	TATEMENTE.	DISCLUSURE	First Named Inventor	Payne et al.
3)	TATEMENT	BY APPLICANT	Group Art Unit	Unknown
i	luca as mamin	donate and a	Examiner Name	Unknown
Chast	(use us many si	heets as necessary)		Chanown
Sheet		1 4	Attorney Docket Number	2105.0013C
				2103.0013C

OTHER DOCUMENTS – NON PATENT LITERATURE DOCUMENTS

Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country

46	AI3	where published.	l
1 .3	Al3	IL DIUNVIIN A KOhist Technique for Arra 11 cor	\vdash
2 8 2006		Templated Chitosan, Web Published 12/06/2003, Article published in January 15, 2004 in Analytical Chemistry, Vol. 76, No. 2.	
100	8		
I	5 13	ZHITOMIRSKY, PETRIC A. ET AL., Cathodic electrodeposition of polymer films and organoceramic films, Materials Science and Engineering B78 (2000) 125-130. Published by Fisevier Science S A 2000	_
CO TRADEN		Science and Engineering B78 (2000) 125-130, Published by Elsevier Sciences S.A. 2000.	
CA TRADE	1		
	1 1		
	1 1		
	l I		
	1		
	ĺ		
ļ	ł		
ļ			
1	ľ		_
	1		
	1		
1	- 1		_
İ	- 1		
1	i		
j	ŀ		
1	- 1	1	
	$\neg +$		
	Í		_
İ	- 1		
xaminer		Date	
ignature	Ī	Considered	mar

and not considered. Include copy of this form with next communication to applicant.

Unique citation designation number.
 Applicant is to place a check mark here if English language Translation attached.